## TWO NEW SPECIES OF AGERATINA (ASTERACEAE-EUPATORIEAE) FROM DURANGO, MEXICO

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Routine identification of Asteraceae from northwestern Mexico has revealed the following novelties.

AGERATINA GRASHOFFII B. L. Turner, sp. nov. Fig. 2

<u>A. cordifolia</u> accedens sed foliis deltoideis vel triangularioovatis, capituescentibus nonglandularibus.

Erect, sparsely branched, perennial herb, 0.8-1.5 m high, arising from stout corm-like rhizomes, the root-system fibrous. Stems terete, striate, 2-5 mm wide, sparsely puberulent, purplish or purplish-mottled, the upper nodes remote, at mid-stem the internodes 10-40 cm long. Leaves opposite, 10-25 cm long, 5-12 cm wide; petioles 3-10 cm long; blades triangular-ovate to deltoid, 3-5 nervate from the base or from somewhat above, sparsely puberulent above and below primarily upon the venation, the margins irregularly crenulo-dentate. Heads numerous in remote, somewhat rounded, corymbose panicles, the latter (1)3-7 arising out of the upper axils, the ultimate peduncles puberulent, mostly 5-15 mm long. Involucre broadly turbinate, 6-8 mm long, 2-3 seriate, subequal; bracts ca 20, linear-lanceolate, green or purplish, ca 1 mm wide, the apices acute to acuminate. Receptacle plane, glabrous. Florets 18-25, somewhat longer than the involucre; corollas tubular, white or pinkish, 5-6 mm long, glabrous, the throat gradually tapering into the tube, the lobes ca 1 mm long. Anthers ca 2 mm long. Stylar appendages minutely papillose. Achenes columnar, 3-4 mm long, hispid; pappus of 20-30 fragile, barbellate bristles, mostly 3-5 mm long. Chromosome number, 2n =ca. 34 pairs (as determined by the late J. Grashoff who collected the type).

TYPE: MEXICO. DURANGO: 26 mi WSW of Durango on highway 40 to Villa Union. Few seen in rocky soil, 28 Sep 1970, <u>Jerold</u> Grashoff 496 (holotype TEX).

Additional specimens examined: DURANGO: Mpio. Durango, 1 km E of Otinapa, along the arroyo that passes through Otinapa, 6 Oct 1978, <u>Garcia 788</u> (TEX). Mpio. Mezquital, W of Station Madre de Ocotan, along an arroyo, 16 Oct 1984, <u>Gonzalez & Acevedo 1508</u> (TEX); 3 km S of Station Madre de Ocotan, 17 Oct 1984, <u>Gonzalez &</u> <u>Acevedo 1559</u> (TEX); ca 10 km from La Guajolota, 30 Sep 1985, <u>Solis</u> 407 (TEX); 8 km from La Guajolota, 6 Oct 1985, <u>Solis 433</u> (TEX). <u>Ageratina</u> <u>grashoffii</u> belongs to the subgenus <u>Neogreenella</u> and is clearly related to <u>A. cordifolia</u> (B. L. Rob.) K. & R., a species with conspicuous glandular trichomes in the capitulescence and possessing strongly cordate leaves. As noted by McVaugh (1984) the <u>A. cordifolia</u> complex is in much need of revisionary study but the taxon described here, what with its deltoid leaves and nonglandular capitulescence, appears clearly distinct.

It is a pleasure to name this taxon for the late Jerold Grashoff who collected the holotype and who's unpublished doctorate (Grashoff, 1972) on the North American <u>Stevias</u> is the most incisive study of that difficult genus to date.

## AGERATINA SUNDBERGII B. L. Turner, sp. nov. Fig. 1

A. acutidentata accedens sed foliis latioribus, petiolis brevioribus, capitulis magnioribus.

Erect perennial herbs 50-70 cm high. Stems simple, terete, striate, purplish, coarsely puberulent. Leaves opposite, mostly 3-5 cm long, 1.5-4.0 cm wide; petioles 1-2 mm long; blades ovateelliptic, 1 1/2 to 2 times as long as wide, somewhat leathery, sparsely puberulent above and below along the veins, 3-5 nervate from the base to somewhat pinnately reticulate, the margins rather evenly serrate. Heads 30-60 in terminal rounded corymbose panicles 3-6 cm high, 10-15 cm across, the ultimate peduncles 3-10 mm long. Involucre turbinate, subimbricate, 2-3 seriate, 6-7 mm high, bracts 10-12, lanceolate, 1-2 nervate, 3-7 mm long, 1.0-1.8 mm wide, puberulent. Receptacle plane, glabrous. Florets 8-16 per head; corollas tubular, white, 5-6 mm long, glabrous or nearly so. Anthers ca 2 mm long. Style branches papillose, somewhat enlarged at the apex. Achenes black, columnar, 3.5-4.0 mm long, sparsely ciliate, the podocarp markedly differentiated; pappus of ca 25 white, flattened, rather persistent barbellate bristles, 5.0-6.5 mm long.

TYPE: MEXICO. DURANGO: Mpio. Durango, 41 mi WSW of Durango along highway 40, 39.9 mi E of Las Adjuntas; on sandstone in oakpine-madrone forests, 27 Sep 1984, <u>Scott Sundberg & Matt Lavin 2894</u> (holotype TEX; isotype MEXU).

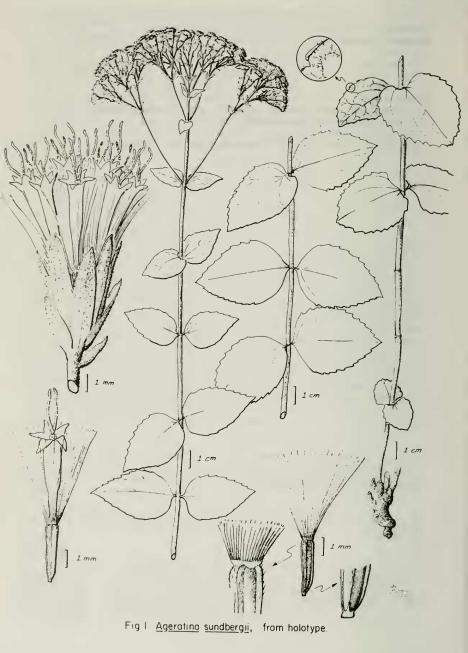
Additional collection examined: DURANGO. Mpio. Mezquital, ca 10 km from La Guajolota, pine-oak forest, 30 Sep 1985, <u>I. Solis 406</u> (TEX).

The species belongs to the subgenus <u>Neogreenella</u> and is apparently most closely related to <u>Ageratina acutidentata</u> (B. L. Rob.) K. & R. which, in my opinion, includes <u>A. durangensis</u> (B. L. Rob.) K. & R. <u>Ageratina sundbergii</u> is readily distinguished by its much larger heads and broader leaves with shorter petioles. It is a pleasure to name the taxon for Dr. Scott Sundberg, promising synantherologist whose speciality is the genus <u>Aster</u>. I am grateful to Dr. M. C. Johnston for the Latin diagnoses.

## LITERATURE CITED

Grashoff, J. 1972. A systematic study of the North and Central American species of <u>Stevia</u>. Doctoral Disseration, The University of Texas, Austin.

McVaugh, R. 1984. Flora Novo-Galeciana 12: 1-1157.



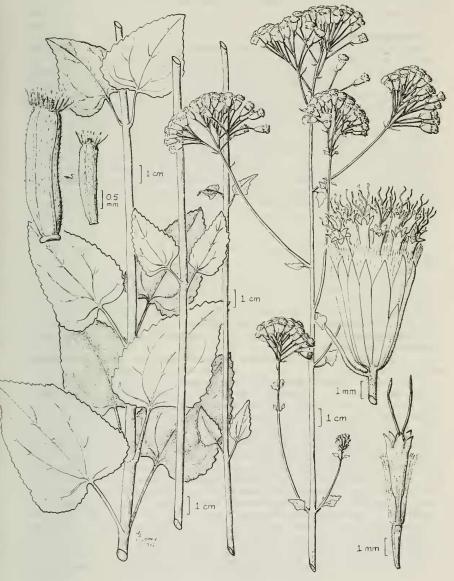


Fig. 2. AGERATINA GRASHOFFII, from holotype.